

Remarks

The Office Action mailed September 8, 2005 has been carefully reviewed and the following remarks have been made in consequence thereof.

Claims 1-10 and 12-20 are now pending in this application. Claims 1-20 are rejected. Claims 1, 12, and 15-20 have been amended. Claim 11 has been canceled without prejudice, waiver, or disclaimer. No new matter has been added.

In accordance with 37 C.F.R. 1.136(a), a one-month extension of time is submitted herewith to extend the due date of the response to the Office Action dated September 8, 2005 for the above-identified patent application from December 8, 2005 through and including January 9, 2006. January 8, 2006 is a Sunday. In accordance with 37 C.F.R. 1.17(a)(1), authorization to charge a deposit account in the amount of \$120.00 to cover this extension of time request also is submitted herewith.

The objection to the oath or declaration is respectfully traversed. Applicants respectfully submit that an oath or declaration was filed with the United States Patent Office on November 4, 2002. Applicants resubmit the oath or declaration with a proof of receipt of the by the Patent Office. Accordingly, Applicants respectfully request that the objection to the oath or declaration be withdrawn.

The objection to the specification is respectfully traversed. Applicants have amended the title. Accordingly, Applicants respectfully request that the objection to the specification be withdrawn.

The rejection of Claims 1-20 under 35 U.S.C §112, first paragraph, is respectfully traversed. Applicants respectfully traverse a statement in the Office Action. The statement states, "The specification fails to describe how a schema of XML can be use to create a schema for the protocol." Claim 11 has been canceled. Although the Office Action suggests that there is no mention in the specification of any procedure for using a schema of XML to create a schema for the protocol rendering Claims 1-20 as containing subject matter which is not described in a way to enable one skilled in the art to make and/or use the invention, Applicants respectfully submit that Claims 1-10 and 12-20 satisfy Section 112, first paragraph. Applicants respectfully submit that one skilled in the art, after reading the specification in light of

the figures, would be able to make and/or use the invention as described in Claims 1-10 and 12-20. Specifically, as an example, the specification states, “Figure 2 is an illustration of a file structure of an extensible mark up language (XML) schema file 10 that is utilized to facilitate configuring multiple devices including PLCs by providing a standard format for defining a protocol for the device...In one embodiment, the device is a PLC and the protocol is Ethernet Global Data...In one embodiment, Exchange element 12 is an EGD Exchange element. Exchange element 12 includes...an Exchange element 18...Further elements of Exchange 18 include...a Transfer Definition element 96. ” (paragraphs 16, 17, 22).

Moreover, as an example, the specification states, “Transfer Definition element 96 includes...a Build Information element 102 and a Variable Or Block Definition element 104. Build Information element 102 includes elements identical to the elements described above included in Build Informations 14, 32, and 76. Variable Or Block Definition element 104 includes a Name element 106, a Description element 108, an Address element 110, a Length In Units element 112, a Data Type element (not shown), an Offset In Bytes element 114, a Bit Offset element 116, and a Point Address element 118. Name 106 is used to reference a name of a variable or a device memory reference. Description 108 is used to reference a description of the variable or device memory. Address 110 is used to reference a device starting address for where the variable/memory is located in the device. Length In Units 112 is used to reference a length for the memory in the device from the address referenced by Address 110. The DataType is used to reference a data type of the variable. Offset In Bytes 114 is used to reference an offset in bytes of where this data is located in the exchange. Bit Offset 116 is used to reference a bit offset within an exchange byte. Point Address 118 is used to reference a point address format of the variable as used by a Human Machine Interface (HMI). This is provided for interoperability with current EGD implementations.” (paragraph 23). Accordingly, Figure 2 illustrates an example of an extensible markup language schema for the protocol of the PLC. Moreover, the specification describes examples of providing an extensible markup language schema for the protocol of the PLC by providing a reference to a device starting address where a variable is located in a device, providing a reference to a length of the variable in the device from an address, providing a reference to a data type of the variable, providing a reference to an offset in bytes of location of data in

an exchange, providing a reference to a bit offset within an exchange byte, and providing a reference to a point address format of the variable as used by a Human Machine Interface. Accordingly, the specification provides examples of an extensible markup language schema for the protocol of the PLC.

Furthermore, Applicants respectfully traverse the statement that Applicants do not provide, within the specification, how validation of an XML occurs. Although the Office Action suggests that there is no mention in the specification of any procedure for validating an XML rendering Claims 1-20 as containing subject matter which is not described in a way to enable one skilled in the art to make and/or use the invention, Applicants respectfully submit that Claims 1-10 and 12-20 satisfy Section 112, first paragraph. Applicants respectfully submit that one skilled in the art, after reading the specification in light of the figures, would be able to make and/or use the invention as described in Claims 1-10 and 12-20. Specifically, as an example, the specification states, "However, since XML parsers are readily available, a user parses the alternative format to create an XML file with grammar according to the schema illustrated in Figure 2. " (paragraph 25). Accordingly, Figure 2 provides an example of a schema used to validate at least one XML file parsed from a comma separated variable file. Hence, the XML file parsed from a comma separated variable can be validated against the schema of Figure 2. Thus, Applicants respectfully submit that Claims 1-20 satisfy Section 112, first paragraph.

For the reasons set forth above, Applicants respectfully request that the rejection of Claims 1-20 under Section 112, first paragraph, be withdrawn.

The rejection of Claims 15-18 under 35 U.S.C. § 101 as being directed to non-statutory subject matter is respectfully traversed. Applicants respectfully traverse the statement that information or data is not patentable. A mere arrangement of printed matter, though seemingly a "manufacture," is rejected as not being within the statutory classes. *In re Miller*, 418 F.2d 1392, 164 USPQ 46 (CCPA 1969), *Ex parte Gwinn*, 112 USPQ 439 (Bd. App. 1955), and *In re Jones*, 373 F.2d 1007, 153 USPQ 77 (CCPA 1967). Moreover, a thing occurring in nature, which is substantially unaltered, is not a "manufacture." *Ex parte Grayson*, 51 USPQ 413 (Bd. App. 1941). A scientific principle, divorced from any tangible structure, can be rejected as not within the statutory classes. *O'Reilly v. Morse*, 56 U.S. 62 (1854). Claims 15-18 do

not recite a printed matter, a thing occurring in nature, and a scientific principle. Rather, Claims 15-18 recite various embodiments of an XML schema. Moreover, Applicants have amended Claims 15-18. Accordingly, Applicants respectfully request that the rejection of Claims 15-18 under Section 101 be withdrawn.

For the reasons set forth above, Applicants respectfully request that the Section 101 rejection of Claims 15-18 be withdrawn.

The rejection of Claims 1, 2, and 6 under 35 U.S.C. § 102(b) as being anticipated by Helms (U.S. Patent Application Publication No. 2002/0078200) is respectfully traversed.

Helms describes a method for configuring a printer through a firewall. The method includes receiving a predetermined device configuration (paragraph 20). Upon receiving the predetermined device configuration, a peripheral device parses a web page to determine one or more device settings or resources specified by the predetermined device configuration to configure itself (paragraph 20). The received predetermined device configuration includes, for example, control commands encoded as extensible markup language (XML) and wrapped in hypertext transfer protocol (HTTP) (paragraph 20). Such control commands include, for example simple network transfer protocol (SNMP) control commands (paragraph 20).

Claim 1 recites a method for configuring a programmable logic controller (PLC) having a protocol, the method comprising the step of “providing an extensible markup language (XML) schema for the protocol of the PLC, wherein said providing an extensible markup language schema comprises formatting an Ethernet Global Data language of the PLC by applying an extensible markup language format.”

Helms does not describe or suggest a method for configuring a programmable logic controller as recited in Claim 1. Specifically, Helms does not describe or suggest providing an extensible markup language (XML) schema for the protocol of the PLC, where providing an extensible markup language schema includes formatting an Ethernet Global Data language of the PLC by applying an extensible markup language format. Rather, Helms describes parsing a web page to determine one or more device settings or resources specified by a predetermined device configuration.

The received predetermined device configuration includes, for example, control commands encoded as extensible markup language (XML) and wrapped in hypertext transfer protocol (HTTP). The control commands include, for example simple network transfer protocol (SNMP) control commands. Accordingly, Helms does not describe or suggest formatting an Ethernet Global Data language of the PLC by applying an extensible markup language format. For the reasons set forth above, Claim 1 is submitted to be patentable over Helms.

Claims 2 and 6 depend from independent Claim 1. When the recitations of Claims 2 and 6 are considered in combination with the recitations of Claim 1, Applicants submit that Claims 2 and 6 likewise are patentable over Helms.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1, 2, and 6 be withdrawn.

The rejection of Claims 3-5 and 7-20 under 35 U.S.C. § 103(a) as being obvious over Helms is respectfully traversed. Applicants respectfully traverse the statement on page 6 of the Office Action. The statement states, "its obvious to convert a CSV file to a XML DTD...in light of applicants own admitted prior art paragraph 2, 3 of the background." Accordingly, Applicants proceed as if Claims 3-5 and 7-20 are unpatentable over Helms in view of Applicants admitted prior art.

Helms is described above.

Applicants admitted prior art describes an Ethernet global data (EGD) protocol. The EGD protocol defines a comma separated variable (CSV) file format for importing and exporting exchanges for the user's devices (paragraph 3).

Claim 11 has been canceled. Claims 3-5, 7-10, and 12-18 depend, directly or indirectly, from independent Claim 1 which recites a method for configuring a programmable logic controller (PLC) having a protocol, the method comprising the step of "providing an extensible markup language (XML) schema for the protocol of the PLC, wherein said providing an extensible markup language schema comprises formatting an Ethernet Global Data language of the PLC by applying an extensible markup language format."

Neither Helms nor Applicants admitted prior art, considered alone or in combination, describe or suggest a method for configuring a programmable logic controller as recited in Claim 1. Specifically, neither Helms nor Applicants admitted prior art, considered alone or in combination, describe or suggest providing an extensible markup language (XML) schema for the protocol of the PLC, where providing an extensible markup language schema includes formatting an Ethernet Global Data language of the PLC by applying an extensible markup language format. Rather, Helms describes parsing a web page to determine one or more device settings or resources specified by a predetermined device configuration. The received predetermined device configuration includes, for example, control commands encoded as extensible markup language (XML) and wrapped in hypertext transfer protocol (HTTP). The control commands include, for example simple network transfer protocol (SNMP) control commands. Applicants admitted prior art describes providing an Ethernet global data (EGD) protocol that defines a comma separated variable (CSV) file format for importing and exporting exchanges for a plurality of devices. Accordingly, neither Helms nor Applicants admitted prior art, considered alone or in combination, describe or suggest formatting an Ethernet Global Data language of the PLC by applying an extensible markup language format. For the reasons set forth above, Claim 1 is submitted to be patentable over Helms in view of Applicants admitted prior art.

When the recitations of Claims 3-5, 7-10, and 12-18 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 3-5, 7-10, and 12-18 likewise are patentable over Helms in view of Applicants admitted prior art.

Claim 19 recites a method for configuring a programmable logic controller (PLC) having a protocol, the method comprising “utilizing a schema to validate at least one XML file parsed from a comma separated variable (CSV) file created by a configuration tool for a protocol different than the protocol of the PLC.”

Neither Helms nor Applicants admitted prior art, considered alone or in combination, describe or suggest a method for configuring a programmable logic controller as recited in Claim 19. Specifically, neither Helms nor Applicants admitted prior art, considered alone or in combination, describe or suggest utilizing a schema to

validate at least one XML file parsed from a comma separated variable (CSV) file created by a configuration tool for a protocol different than the protocol of the PLC. Rather, Helms describes parsing a web page to determine one or more device settings or resources specified by a predetermined device configuration. The received predetermined device configuration includes, for example, control commands encoded as extensible markup language (XML) and wrapped in hypertext transfer protocol (HTTP). The control commands include, for example simple network transfer protocol (SNMP) control commands. Applicants admitted prior art describes providing an Ethernet global data (EGD) protocol that defines a comma separated variable (CSV) file format for importing and exporting exchanges for a plurality of devices. Accordingly, neither Helms nor Applicants admitted prior art, considered alone or in combination, describe or suggest utilizing a schema to validate at least one XML file parsed from a comma separated variable file. For the reasons set forth above, Claim 19 is submitted to be patentable over Helms in view of Applicants admitted prior art.

Claim 20 recites a method for configuring a programmable logic controller (PLC) having a protocol, the method comprising “utilizing a schema to validate at least one XML file parsed from a comma separated variable (CSV) file created by a configuration tool.”

Neither Helms nor Applicants admitted prior art, considered alone or in combination, describe or suggest a method for configuring a programmable logic controller as recited in Claim 20. Specifically, neither Helms nor Applicants admitted prior art, considered alone or in combination, describe or suggest utilizing a schema to validate at least one XML file parsed from a comma separated variable (CSV) file created by a configuration tool. Rather, Helms describes parsing a web page to determine one or more device settings or resources specified by a predetermined device configuration. The received predetermined device configuration includes, for example, control commands encoded as extensible markup language (XML) and wrapped in hypertext transfer protocol (HTTP). The control commands include, for example simple network transfer protocol (SNMP) control commands. Applicants admitted prior art describes providing an Ethernet global data (EGD) protocol that defines a comma separated variable (CSV) file format for importing and exporting

exchanges for a plurality of devices. Accordingly, neither Helms nor Applicants admitted prior art, considered alone or in combination, describe or suggest utilizing a schema to validate at least one XML file parsed from a comma separated variable file created by a configuration tool. For the reasons set forth above, Claim 20 is submitted to be patentable over Helms in view of Applicants admitted prior art.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 3-5 and 7-20 be withdrawn.

Moreover, Applicants respectfully submit that the Section 103 rejection of Claims 3-5 and 7-20 is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Helms nor Applicants admitted prior art, considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Helms with Applicants admitted prior art because there is no motivation to combine the references suggested in the cited art itself.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

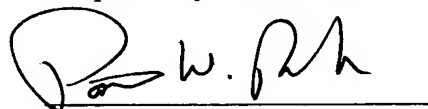
Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one

reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically, Rather, Helms teaches parsing a web page to determine one or more device settings or resources specified by a predetermined device configuration. The received predetermined device configuration includes, for example, control commands encoded as extensible markup language (XML) and wrapped in hypertext transfer protocol (HTTP). The control commands include, for example simple network transfer protocol (SNMP) control commands. Applicants admitted prior art teaches providing an Ethernet global data (EGD) protocol that defines a comma separated variable (CSV) file format for importing and exporting exchanges for a plurality of devices. Since there is no teaching nor suggestion in the cited art for the combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejections of Claims 3-5 and 7-20 be withdrawn.

For at least the reasons set forth above, Applicants respectfully request that the rejections of Claims 3-5 and 7-20 under 35 U.S.C. 103(a) be withdrawn.

In view of the foregoing amendment and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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